

Title (en)

Laminated plastic container and process for preparation thereof.

Title (de)

Mehrschichtiger Kunststoffbehälter und Verfahren zu dessen Herstellung.

Title (fr)

Récipient à couches multiples et procédé de fabrication dudit récipient.

Publication

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Application

EP 81305102 A 19811028

Priority

- JP 15224380 A 19801031
- JP 15224580 A 19801031

Abstract (en)

[origin: US4393106A] Disclosed is a laminated plastic container in the form of a bottle, the wall of which comprises a substrate formed of a melt-moldable plastic material, a coating layer formed on at least one surface of the substrate, said coating layer being composed of a copolymer consisting essentially of 99 to 70% by weight of vinylidene chloride and 1 to 30% by weight of at least one acrylic or methacrylic monomer and further including up to 100 parts by weight of at least one member selected from other ethylenically unsaturated monomers per 100 parts by weight of the total amount of said two monomers, said copolymer having an oxygen permeation coefficient of less than 9×10^{-14} ccxcm/cm²secxcmHg as measured at a temperature of 20 DEG C. and a relative humidity of 100% and a water vapor permeability coefficient of less than 3×10^{-3} g/cm²m²day as determined according to the method of JIS Z-0208, and a protecting surface layer of a film-forming synthetic resin other than a vinylidene chloride resin, which is formed contiguously to said coating layer. This laminated plastic container is excellent in the barrier property to various gases such as oxygen, water vapor, nitrogen and carbon dioxide gas and other properties required for plastic containers. The humidity dependency of the oxygen barrier property is highly improved in this laminated plastic container.

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B65D 23/02; C08J 7/04; B32B 27/30

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- US 4058649 A 19771115 - STEINER ROBERT HENRY
- US 3676185 A 19720711 - PHILLIPS CYRIL HOWARD, et al
- GB 1241948 A 19710804 - ICI LTD [GB]
- DE 1142514 B 19630117 - PLAX CORP
- GB 1582296 A 19810107 - VALYI EMERY I
- CH 412714 A 19660430 - CONTINENTAL GUMMI WERKE AG [DE]

Cited by

CN104875942A; CZ305416B6; WO0239754A1; US12012253B1; US10894625B1; US11518569B2

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